

New Approaches in Rural Electrification Fund Design for Sustainable Development - The New Paradigm

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Regional Conference on Enabling Environment for Private Participation in Rural
Energy Service Delivery and Financing in the SADC Countries

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Abstract

This paper intends to provide a summary analysis of major design elements that need to be considered in establishing rural electrification funds. The analysis and recommendations are based on best practices of designing, managing, and operating rural electrification funds (REFs) in other parts of the world. Establishing modern REFs – based on the principles of all stakeholder inclusion and market oriented operations away from direct political interference – are seen to be of paramount importance in the process of the design, preparation, and implementation of large scale countrywide rural energy service delivery and rural electrification programs. The aim of the discussion in this paper is to contribute to common policy approaches and frameworks for establishing and managing REFs in the Southern African Region by presenting an approach design and a replicable conceptual model.

Key Words: *Rural electrification fund (REF), policy issues, institutional arrangements, sustainability of rural energy services, new approaches to rural energy financing, rural consumer participation, private sector participation, REF management and operations, role of donors, government in REF capitalization.*

I. Introduction – Prevailing Situation and Realization

The economic and social development of rural areas is increasingly becoming a priority for many developing country governments. Rural development history, process, and experience have brought about a broad consensus among national and international stakeholders on the necessity of developing rural areas as a major and integral part of the overall national sustainable development processes. Since the early 1990s, developing countries and the donor community began translating this consensus into joint policies and programs that focus on integrated rural development processes. These joint policies, best reflected in Growth Poverty Reduction Strategies (GPRS), have been trying to include the provision of increased and modern energy services as a critical element for sustainable development. But, in several GPRS we don't see a clear articulation of the role of increased rural energy services (RES) as a key component of the integrated rural

development for poverty alleviation. Because of this, many developing countries are still missing comprehensive rural electrification policies, strategies, institutions, and appropriate and adequate financing mechanisms for RES.

In filling this gap, a new and very comprehensive initiative was launched on August 31, 2002 at the World Summit on Sustainable Development (WSSD) in Johannesburg, South Africa. It is named the Global Village Energy Partnership (GVEP), and represents the newest global rural energy initiative. GVEP is intended to assist the developing countries through support in developing policies and action plans that involve and engage the whole spectrum of stakeholders in the development and provision of RES, as well as providing a comprehensive knowledge exchange environment for all of those with an interest and stake in this process. The Partnership will help achieve the

internationally recognized Millennium Development Goals.

Acknowledging the pivotal role of energy in sustainable rural development is no longer an issue. Identifying and implementing country-by-country tailored ways and adequate mechanisms in financing sustainable rural energy services is an issue, however, that needs policy and institutional discussions among stakeholders. The fact is that developing country governments do not have enough budgetary resources to finance all the needs for rural energy services. On the other hand, it is unlikely that grant and/or concessional support from multilateral and bilateral donors for energizing rural areas will last forever. So, other ways of financing rural energy services delivery, such as the mobilization of private sector money, should be explored and the environment for activating them should be enabled.

Worldwide experience has, in many cases, shown that open and fair markets are an efficient and effective way for mobilizing private resources and capital in any development endeavor. Although in principal this is applicable to rural markets, we have to carefully consider these market specifics. In the transitory period towards well developed private markets for rural energy services delivery, developing country governments need to seriously focus on leveraging more of their budget allocations for rural energy and rural electrification with multilateral and bilateral grant and concessional funds available for this purpose. In achieving this, these governments need to put in place comprehensive rural energy and electrification policies, enact an appropriate legal and regulatory framework, and establish dedicated institutions to manage and finance this process without distorting emerging rural energy service markets by implementing wrong subsidy mechanisms and programs.

The purpose of this paper is to present a view of major design elements in establishing rural electrification funds (REFs) as a vehicle for financing rural energy services, primarily rural electricity services. In achieving this objective, the paper focuses initially on policy issues related to the establishment of dedicated REFs; follows on with appropriate

institutional arrangements for REF management and supervision; summarizes proposed roles for donors and private sector in REF capitalization; and ends the discussion with subsidies and related issues and options. Examples and lessons learned support the discussion. Messages and conclusions are given at the end of each section, and recommendations are summarized at the end of the paper.

II. Establishing Rural Electrification Funds – Policy Issues

Electricity is a critical input to almost all social and income generation activities. This is true for urban as well as rural areas. In the case of rural area development where accelerated poverty alleviation and sustained growth is a major challenge, provision of electricity and other energy services becomes a top political, economic, and social priority. As rural electrification (RE) is a long-term undertaking that requires large amounts of financing, it is important to understand that a comprehensive RE policy should be in place first, before embarking on a large RE program implementation.

The RE policy should become an integral part of the overall national energy sector policy and GPRS where it is developed and approved. It has to provide for stakeholder-wide agreed (or accepted), donor community included, guidance and approaches in four major areas:

(i) *Legal and regulatory framework* to be established and enforced for rural energy provision and service delivery (including rural electrification), which enables, in the long term, the creation of undistorted rural energy markets,

(ii) *Institutional arrangements* for RE policy implementation, including the establishment of dedicated REFs for facilitating fund raising and disbursement process for RE project/program implementation. A model REF should provide implementation of internationally accepted rules, standards, and procedures that ensure accountability, effectiveness, and efficiency of the RE process,

(iii) *Role of various stakeholders* and their participation in the RE process – identifying, primarily, the role of government, private sector including technology providers, rural consumers and their associations, as well as donors – in the context of establishing and developing self-sustained rural energy markets in the longer term, and

(iv) *Subsidy design and delivery* - giving policy answers to questions such as who, what for, why, how much, and for how long will subsidy be received – while providing equal opportunity to environmentally friendly technologies and their private providers to compete in an emerging open and fair market environment.

These areas of RE policy focus are related in various ways to one focal and major RE institution, which is a *dedicated fund for rural electrification*. This is true because:

(i) Most countries, before embarking on the RE process in a well-organized and coordinated way, need a legal and regulatory basis in place, which designates institutions like rural energy authorities that manage REFs to finance and implement rural electrification programs,

(ii) Comprehensive REFs represent an objective and, to a great extent, an independent institution with the potential to ensure accountability and efficiency when designed and run along with commercial lines and principles, at arms length from unreasonable political influence,

(iii) All RE stakeholders have a vested interest in REFs (both in its capitalization and utilization), because it represents a major source of finance for RE programs, and

(iv) REFs represent the main channel for directing government and donor subsidies appropriately and adequately in a market-oriented environment.

The policy message that comes out from the analysis in this section is that the establishment of REFs is a prerequisite for embarking in a large RE program implementation. It should be based on a

comprehensive and widely accepted and agreed upon RE policy. Furthermore, it should consider the role that all major RE stakeholders are expected to play in the RE process, and involve these stakeholders in the consultation and decision-making process prior to establishing the REFs. Additionally, successful REFs are accountable and transparent, free of direct political influence, and usually operate along commercial lines.

III. Institutional Arrangements for REF Management and Operations

There is no single model for establishing and managing a rural electrification fund (REF). However, in countries with successful RE experience, the entity responsible for implementing the fund has a high degree of operating autonomy and accountability. The establishment of such a fund needs to consider new trends and successful patterns of RE financing.

All REFs are funded out of tax payers' money, and almost every REF needs to be leveraged with funds that come from resources other than government budget. To that end, it is important to understand and implement an adequate and widely acceptable approach in not only designing and establishing of the REF, but also in its management and operations. The following points represent issues that need to be adequately addressed - in the context of each developing country - when designing REFs management policies and operation practices: [1]

- REF establishment needs to be adequately regulated in order to provide the necessary legal basis for independence and accountability. Their legal establishment needs to fit into the legal and regulatory environment of the concerned country.
- Government ministries in charge of energy issues and, to some extent the existing Regulatory Authorities, should be assigned a wider role and undertake greater responsibility for and authority of the REFs in terms of RE policy implementation, REFs Boards members'

appointment, and REFs management supervision.

- The REF Management Board should include representatives from all major stakeholders in the RE process, namely government, local consumer associations, civil society, private sector, regulator, local financial institutions, and possibly major donor representatives.
- The Board of any REF should exercise supervisory authorities and policy functions and leave the day-to-day operation and management in the hands of the REF Director/Manager and his staff. This should be accomplished through the adaptation of internationally accepted rules and procedures for fund operations and management.
- In order to ensure transparency, equality, and accountability, as well as to be able to attract donors' support and participation, the REFs will need to be managed and operated along commercial lines with full transparency and accountability. This does not, however, prevent the government from exercising its legitimate role of policy making, strategy development and supervision through adequate participation in the Board.
- Rules and procedures for the management and administration of the REFs should be based on widely accepted international best practices. This can be achieved by the governments through seeking donor input and outside input from consumer groups and other private sector entities in the countries. Such a process will help the governments in developing practical and rational procedures and rules for the design and implementation of the REFs.

Other key considerations that should guide the establishment and operation of such a fund are:

- Funds should be free of political interference and should be used only for the specific purpose for which they are established and no other purpose. This can be achieved through establishing full transparency and accountability by the

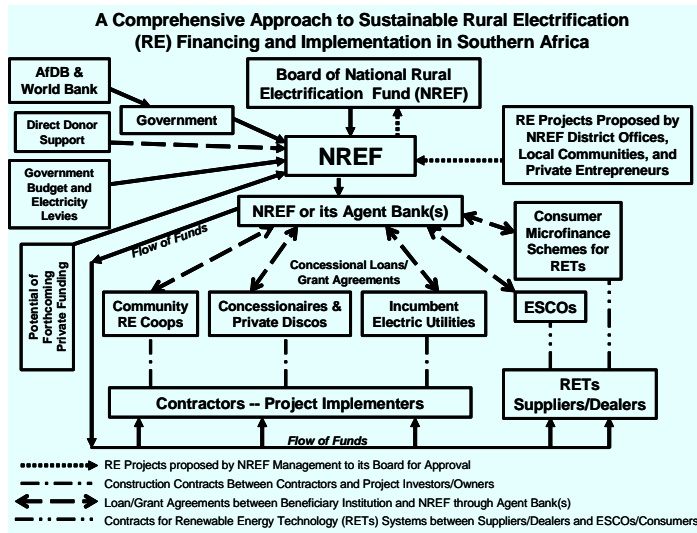
fund managers to the Board composed of public and private representatives.

- Governments should capitalize the REFs adequately. Possible major sources of funds for doing this are (i) privatization proceeds from the sale of shares of national power utilities, (ii) government bonds and budgets, (iii) multi- and bilateral donor financing, and (iv) commercial and private sector financing.
- It is generally advisable to keep the operational management of the fund outside of public administration. This is also necessary to ensure that commercial approaches are instituted in REFs' operations and best available local human capacities are mobilized.

It is important to add that regardless of the characteristics of an REF (and the type and nature of subsidy) the success of any fund depends on how it is administered. One specific element of this is the criteria and process that is used for identifying and selecting projects for financing and implementation. Any proposed rural electrification project needs to undergo a technical and economic evaluation before approval. This imposes the need for establishing a transparent approach to the selection of projects that not only meet the overall Government policy objectives, but also ensures the success of the projects in terms of consumer satisfaction and rural development for poverty alleviation. In other words, the social benefits of the projects should also be estimated in addition to the economic benefits.

Based on its long and extensive experience with rural energy and electrification issues in the developing world, CORE International has developed its own overall approach for this important area. Schematically this approach is summarized in the following Exhibit 1, which is designed and filled in such a way as to answer most of the questions and issues surrounding policy, funding, management, operation, and stakeholder participation in rural energy delivery, primarily rural electrification. [2]

Exhibit 1: CORE's overall approach to sustainable RE/RES development



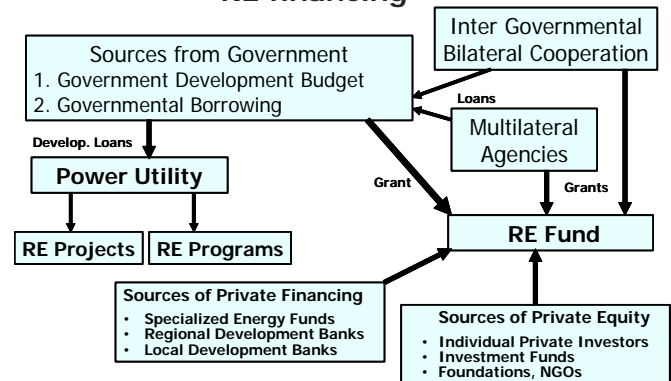
In summary, we may conclude that the way a country establishes, manages, and mandates to operate its REF is of great importance and has a major impact on its success or failure. A poorly designed and institutionalized REF may result in low or no capitalization by donors and the private sector, which has major impacts on the level of rural electrification in the given developing country.

IV. Role of Government Donors and Private Stakeholders in the Capitalization of the REFs

Almost all RE programs are associated with Rural Electrification Funds (REFs) in one form or another. They are the basic instruments that governments use in implementing their RE plans and programs. Today it is clear that governments alone cannot provide all the funds required to achieve their objectives for RE, and so other resources need to be harnessed and mobilized. The potential sources of RE financing may be summarized as follows: (i) national funds for economic and/or rural development, (ii) government budget, (iii) national development banks, (iv) international development institutions such as the World Bank (WB) and African Development Bank (AfDB), (v) bilateral cooperation, (vi) levies charged on consumers that use electricity, (vii) foundations and private business donations, (viii) private sector investors, (ix) consumers, and (x) special tax funds.

Exhibit 2 shows an illustration of new trends and patterns of RE financing through REFs. It also shows the relationship of the REFs to the government, donors, national power utility, and the private sector. [1]

Exhibit 2: New trend and patterns of RE financing



The ownership structure of an REF needs to be carefully designed in order to maximize the utility of the Fund. While complete government ownership of such funds formally provides access to a variety of sources of finance, in practice most official sources of funds prefer not to see full government ownership of the REF. Participation of private parties in the REF ownership enhances its credibility and attractiveness. Joint financing between public budgets and private sector entities represents, in principal, a widely accepted approach because of the flexibility it provides for sharing risks and mobilizing soft debts and equity finance.

In assessing the availability and identifying the sources of finance, the Government should focus on the following:

- Assume a flexible REF ownership structure and integrate the interest of all major stakeholders in the REF.
- Assess the receptiveness of multilateral agencies and regional and local development banks to the structure the REF.
- Approach bilateral donors as well as countries that can supply equipment and

technical assistance to maximize fund capitalization.

- Check with equipment suppliers for their ability to provide soft trade or export financing.
- Review the availability of specialized energy funds and explore the potential for capitalizing on these funds.

Determining the ownership structure is extensively intertwined with the design of the financing structure and management of the RE Fund. These items should be continuously modified through an interactive process among major stakeholders throughout the design and development phase.

Community participation in REFs established with the sponsorship of the governments should be a necessary condition. All too often the structures of government funds do not involve community representatives and, thus, lack necessary credibility. Also, they are unable to meet community needs as the lack of participation by the community limits the fund managers to have a keen sense of the community needs.

The essence of the role of various stakeholders in RE process financing consists of their participation and relationship with the REF. Each stakeholder group will participate, in its own way, in leveraging or funding of the REF when they conclude that their specific policies and interests can be met in the REF. More explicitly:

- *Donors* will leverage the REF when they see that it is well defined, designed, managed and operated, in compliance with (to an acceptable extent) their policy objectives, guidelines, rules and procedures, while exercising accountability, openness and transparency. In achieving all of this it is advisable to involve potential donors from the early stages of REF design and establishment.
- *Private sector* players are likely to participate in the REF when they see that: (i) they can have a voice in the REF decision-making and management process, (ii) the REF is run along

commercial lines and far from direct political interference, (iii) a reasonable potential for profit does exist, and (iv) rural energy markets are likely to emerge and sustain and the government policy is clear in supporting these markets.

- *Local rural communities* will increase their participation in the RE process and will eventually be willing to participate with higher upfront cost-sharing for their electrification when they feel that they have a stronger voice in the REF. This entails their active involvement and consultation during REF establishment, as well as being represented in the REF Management Board. This will bring about more people electrified for the same amount of money, etc.

V. Granting Subsidies - Issues

There are many examples of schemes for financing rural electrification around the world. All of them share one thing in common - *some form of subsidy*. The need for subsidy in itself is not as undesirable as a misallocated subsidy maintained over a long time.

Subsidies for RE can be grouped into (i) support by providing technical assistance and capacity building to communities, NGOs, and local private energy service delivery entrepreneurs, and (ii) support to alleviate the high cost of initial investment needed to build the electricity system and connect rural poor to it. We do not mention subsidies here for operating the electricity systems and/or subsidies for electricity pricing because these types of subsidies have widely shown that they heavily compromise sustainability, artificially increase consumption and in most cases cause harm to the environment, and distort the energy markets resulting in under investment in the energy sector which brings about deteriorated power quality and reliability. Ultimately, this can undermine the overall economic growth of a country.

Important key factors that should be explicitly addressed in the area of subsidy

when designing REFs include the following:
[1]

- *Use Competition for Funds:* Competition for subsidies can help minimize RE program costs and promote good customer service. This may be achieved by increasing the number of organizations that could access the REF.
- *Target subsidies:* Where resources are limited, selective targeting of subsidies is always preferred. By and large, the people who do not have electricity connections are the poor and indigenous communities. The subsidy, based on the average cost of connections, may allow for an apparent average profit on each connection. Targeting subsidies to specific groups or locations, however, may complicate administration and planning. Initially, the Government may try to target subsidies, attaching to the RE plans a list of communities and the expected number of connections in each community. Linking payment of the subsidy to a measure of service or connection would reduce the risk of poor service. It would also greatly increase the complexity and burden of monitoring. While connections are not a perfect measure, they do have the benefit of being easily verifiable and are therefore useful.
- *Provide Incentives to the Private Sector:* Any incentives available to the private energy providers should be clearly articulated and well publicized. In addition, penalties for failing to complete the program should be included in all contracts awarded from the fund. For example, larger and more attractive subsidies may be provided to those providers that agree to connect more distant communities and especially poor sections of the rural population.
- *Covering the Cost of Service:* The regulator should ensure adequate level of competition for financing through the REF. Also, in the absence of a real market, the regulator should set prices that the consumers can be charged.

A primary conclusion of this section is that it is best when subsidies are: (i) for capital investment, (ii) targeted to those most in need, (iii) transparent, (iv) granted through competition among energy service providers, and (v) measurable in terms of what they are made against.

VI. Time to Establish REFs in the SADC

A main objective of the energy sector policy in almost all SADC countries is to create an environmentally and financially sustainable energy sector that will provide cost-effective energy access to the entire population, thereby enabling poverty reduction and sustainable growth, and greater private sector participation. Moreover, further integration into the Southern African Power Pool (SAPP) is another region-wide policy objective which will increasingly contribute to more efficient use of the energy resources while increasing energy reliability and security in the whole region.

Access to modern rural energy services and affordability to ensure that poor and rural areas benefit from reforms are important elements of rural energy policy in the region. Governments aim at improving energy equity issues so that the populations that live in rural areas and below the poverty line will be able to have minimal access to modern energy sources. The rural electrification can be undertaken by increasing grid connections for appropriately located villages and/or by developing primarily hydro energy systems mini-grids where appropriate. Use of solar PV represents another viable option for individual households in various remote rural areas. All these models and options need to be translated into programs and projects. And, programs and projects need not only to be designed and prepared, but also financed. The latter can be facilitated only through appropriate institutions like REAs that manage REFs. Examples from Zambia and Lesotho indicate that the region is moving in this direction. While examples from South Africa show that local funds are operational in the Southern African Region. Box 1 summarizes such type of fund operating in South Africa.

Box 1: Local Government Electrification Fund in South Africa [3]

South African Government, through its Department of Minerals and Energy, has mandated the South Africa National Electricity Regulator (NER) to manage and administer a local government electrification fund (Fund). The Fund was created to assist Local Governments in defraying the cost of electrification. The criteria for allocations and the ranking of projects in accordance with demographics and needs in the respective provinces are done by the External Electrification Funding Evaluation Committee (EEFEC) a committee comprising members representing the Department of Minerals and Energy, the National Electricity Regulator (NER), South African Local Government Association (SALGA), the Development Bank of Southern Africa (DBSA) and Eskom. The EEFEC submits its recommendations for the allocation of funding to electrification projects to the NER Board for approval.

General Criteria include:

- Preference is given to Presidential focus areas to support and enhance other infrastructure development in an area.
- Projects with existing formal and/or informal housing receive higher priority.
- Ample credit given to municipalities that had a sound track record with electrification.
- Projects are limited to ensure that no single project was allocated funds for more than 2000 connections, in an attempt to spread the available funds as widely as possible.
- The allocation amount per connection is limited to a certain amount.
- The projects would be ranked per province from the smallest capex per connection.
- The biggest project in connection numbers per applicant would be ranked secondly.
- Disqualification and penalization criteria would be applied in the following ranked order:
 1. projects that are not for new connections.
 2. the Local Government is not licensed for the specific area.
 3. the relevant Local Government experiences serious problems to pay its bulk account to Eskom.
 4. the Local Government has a history of poor performance in respect of electrification or electricity supply.
 5. the Local Government applies electricity tariffs that were not approved by the NER.

In addition to the above criteria, the EEFEC decided to take into consideration the real needs of the respective provinces and to make provision for these when allocating funds.

VII. Conclusions and Recommendations

It is clear that rural electrification in many developing countries, Southern African ones included, is becoming a top priority for the governments. It is a long-term process that requires not only a strong political commitment, but also very large amounts of funding, which governments are unlikely to be able to mobilize from their own budgets only. Based on the messages summarized and conclusions derived at the end of each section of this paper, we would like to make the following recommendations:

1. Based on our analysis and the best experience from other parts of the world, it is recommendable that the countries of South Asia should consider the establishment of dedicated REFs as an important policy issue for decision before designing and embarking on large RE program implementation.

2. In order to ensure success and sustainability in financing RE processes with REFs – ensuring REFs’ donor and private sector leveraging - they should be established as independent entities under government supervision, managed and operated along commercial lines, and provide for accountability and transparency.

3. The role of various stakeholders in the RE process financing is of critical importance. Stakeholder groups such as donors, private sector, and consumer associations will participate and leverage REFs established and seed-money financed by governments only when they will see that their specific interests can be met in these REFs. Involving all these stakeholder groups from the early stages of REFs design and establishment is the best way to ensure their commitment and participation in the REFs.

4. It is clear that some form of subsidy will be required in any RE program. The issue is what type of subsidy and how to deliver it. REFs represent an appropriate instrument for delivering subsidies without distorting the emerging rural energy service delivery markets. Furthermore, a clear and socially fair subsidy policy and program is a precondition to sustainability, effectiveness, and efficiency. This subsidy policy and program should ensure that subsidies are delivered: (i) to initial capital investment alleviation, (i) to those most in need, (iii) transparently, (iv) through competition among energy service providers, and (v) against measurable results.

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New Approaches in Rural Electrification Fund Design for Sustainable Development - The New Paradigm



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1. Introduction

- ❑ Pivotal role of energy in the sustainable rural development is widely acknowledged
- ❑ Energy can be an effective entry point for poverty alleviation activity – Rural Energy and GPRS Issue
- ❑ Traditional sources of financing rural energy services are now on the decline – Rural energy markets represent another future opportunity
- ❑ Private sector and/or community-led rural energy services are increasingly seen a viable alternative – the GVEP approach
- ❑ REFs as a vehicle for financing RES and RE



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2. Establishing Rural Electrification Funds – Policy Issues

The policy areas that need attention are:

- A. Establishment of legal and regulatory framework for rural energy provision
- B. Establishment of appropriate institutions to facilitate fund raising, e.g. Rural Electrification Fund (REF)
- C. Identification of the role of various stakeholders to promote RE – governments, private sector including equipment vendors, rural consumers or community, donors
- D. Subsidy design and delivery



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2. Establishing Rural Electrification Funds – Policy Issues – cont'd

Why dedicated Fund for RE/RES?

- i. Large RE/RES programs need substantial resources and take a long time to implement
- ii. Streamlining of efforts can be achieved through REFs
- iii. REFs represent a good mechanism for involving stakeholders in the approval and implementation process of large RE/RES programs
- iv. Accountability and transparency can be achieved if this is an objective
- v. REFs represent a proven channel for “smart” subsidies



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3. Institutional Arrangements for REF Management and Operations

- ❑ There exists no single best model for establishing and managing REFs
- ❑ However, a key design element in the successful implementation of RE is the high degree of operational autonomy and accountability



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3. Institutional Arrangements for REF Management and Operations – cont'd

- ❑ Important REF designing elements are:
 - ✓ Need of adequate regulation providing for independence and autonomy
 - ✓ Broader role needs to be assigned to Government ministries and the Regulator in terms of RE policy implementation, REF Board Members appointment, and REF management supervision
 - ✓ Major stakeholder need to be adequately represented in the REFs boards
 - ✓ Management of the fund should be along commercial lines



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3. Institutional Arrangements for REF Management and Operations – cont'd

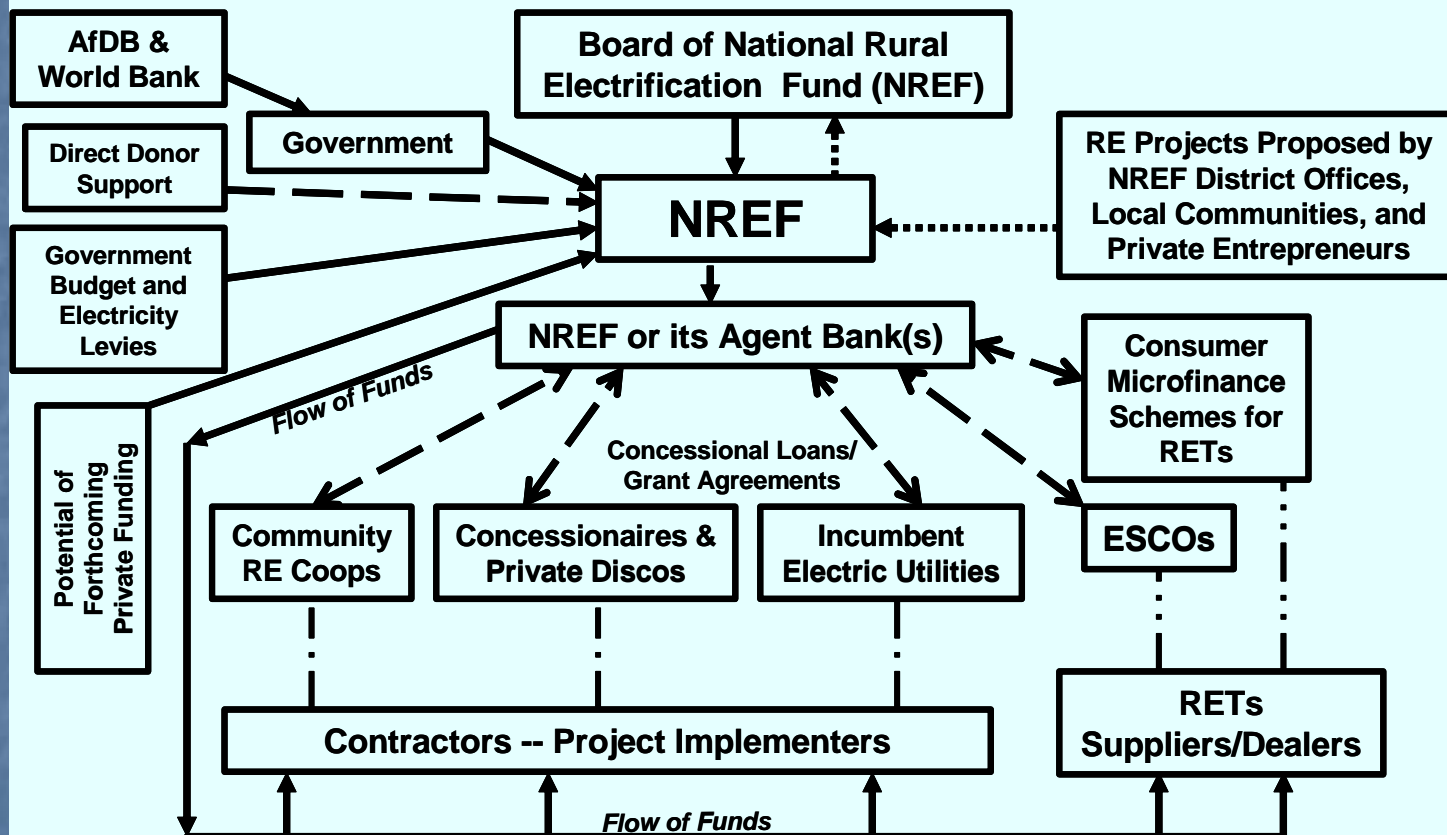
- ❑ Important REF designing elements are: (cont'd)
 - ✓ REF's Day-to-day operation needs to be left with the Fund management and its staff
 - ✓ Rules and procedures for the management and administration REFs
 - ✓ REFs should be free of unreasonable political interference
 - ✓ Governments need to adequately capitalize REFs for donors and possibly private sector to participate
 - ✓ Keeping REFs outside public administration is advisable



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A Comprehensive Approach to Sustainable Rural Electrification (RE) Financing and Implementation in Southern Africa



-➔ RE Projects proposed by NREF Management to its Board for Approval
- - - - - Construction Contracts Between Contractors and Project Investors/Owners
- ← - - - - ➔ Loan/Grant Agreements between Beneficiary Institution and NREF through Agent Bank(s)
- Contracts for Renewable Energy Technology (RETs) Systems between Suppliers/Dealers and ESCOs/Consumers



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4. Role of Government, Donors, and Private Stakeholders in the Capitalization of the REF

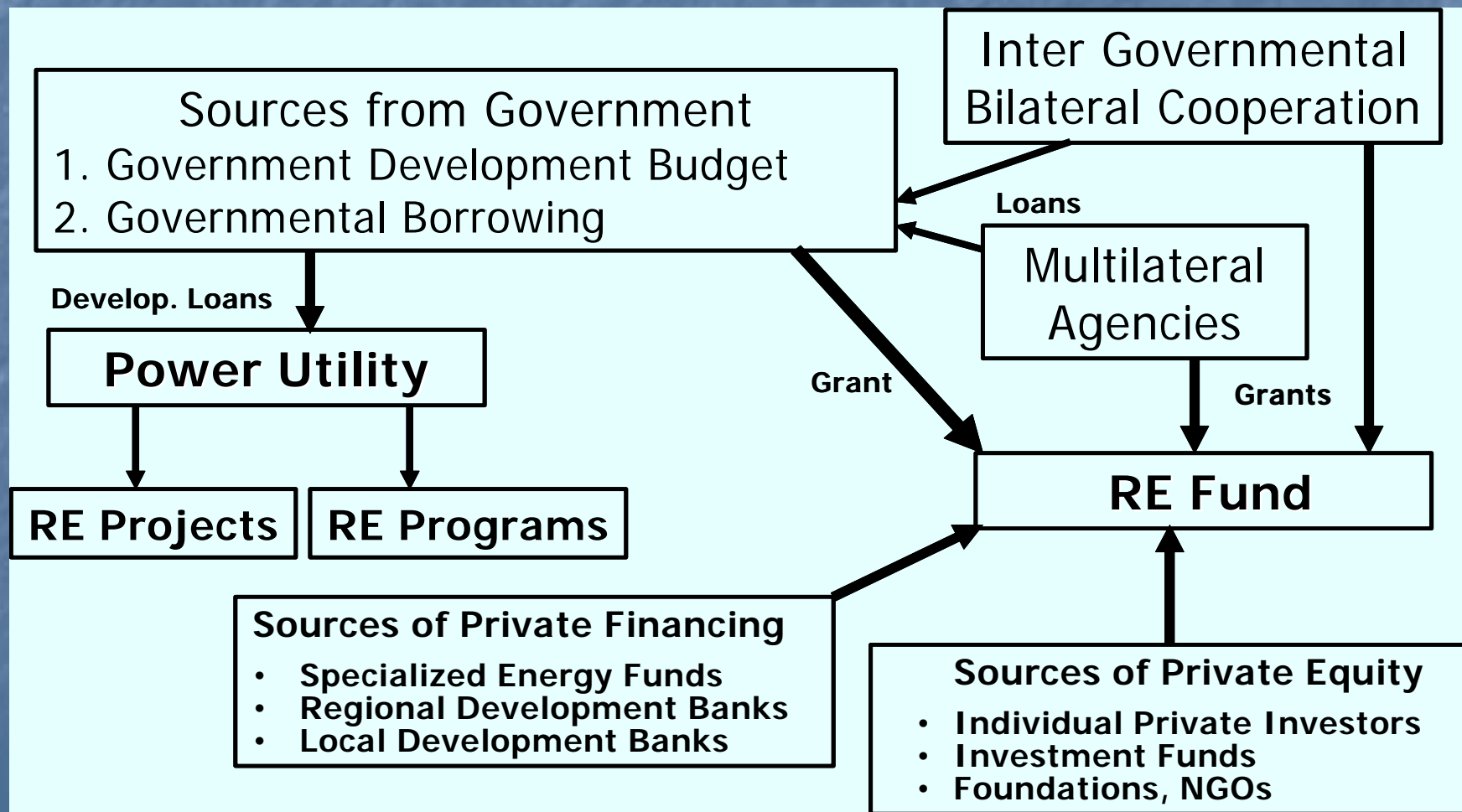
- ❑ Almost all RE programs are associated with Rural Electrification Funds (REFs) in one form or another
- ❑ Today it is clear that governments alone cannot provide all the funds required to achieve their objectives for RE
- ❑ The potential RE financing may come from (i) Governments, national and international development banks, (iii) bilateral cooperation, (iv) levies charged on consumers that use electricity, (v) foundations and private business donations, (vi) private sector investors, and (vii) consumers themselves



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New Trends and Patterns of RE Financing





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4. Role of Government, Donors, and Private Stakeholders in the Capitalization of the REF – cont'd

- ❑ Maintain flexible ownership structure of REF to integrate the interest of all major stakeholders
- ❑ Donors are most likely to leverage any REF when they see that they are well designed, managed, and operated, and are, to a large measure, in compliance with their policies and procedures
- ❑ Achieve donor support by involving them from the early stages of REF design
- ❑ Assess the potential of other specialized funds possible support in capitalization of the fund



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4. Role of Government, Donors, and Private Stakeholders in the Capitalization of the REF – cont'd

- ❑ Private sector players are likely to participate in the REF when they see that:
 - ✓ they can have a voice in the REF's decision-making and management process
 - ✓ the REF is run along commercial lines and far from direct political interference
 - ✓ a reasonable potential for profit exists
 - ✓ sustainable rural energy markets are likely to emerge and the government policy supports such markets



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4. Role of Government, Donors, and Private Stakeholders in the Capitalization of the REF – cont'd

- ❑ Local rural communities will increase their participation in the RE process and eventually be willing to participate with higher upfront cost-sharing for their electrification when they feel that they have a stronger voice in the REF
- ❑ This entails their active involvement and consultation during REF establishment, as well as being represented in the REF Management Board



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5. Granting Subsidies – Issues

- ❑ All RE/RES programs share one thing in common – *some form of subsidy*
- ❑ “Smart” subsidies for RE can be grouped in form of:
 - i. support by providing technical assistance and capacity building to communities, NGOs, and local private energy service delivery entrepreneurs
 - ii. support to alleviate high cost of initial investment needed to build the electricity system and connect rural households to it



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5. Granting Subsidies – Issues

- ❑ Key factors for consideration while designing subsidy schemes to be channeled through the REFs:
 1. Competition for subsidies – lowest proposed wins
 2. Targeted subsidies – one time subsidies for capital expenditures to those most in need
 3. Provide incentives to the private sector – clearly articulated and well publicized, and associated with penalties for non-per-contract performance
 4. Recovery of cost of service – Regulators need to ensure that tariffs can cover costs of services



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6. Time to Establish REFs in the SADC

- ❑ A main objective of the energy sector policy in almost all SADC countries is to create an environmentally and financially sustainable energy sector that will provide cost-effective energy access to the entire populations
- ❑ Further integration into the Southern African Power Pool (SAPP) will increasingly contribute to increased access and more effective use of the energy resources
- ❑ Governments aim at improving energy equity issues so that the populations that live in rural areas and below the poverty line will be able to have minimal access to modern energy sources



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6. Time to Establish REFs in the SADC – cont'd

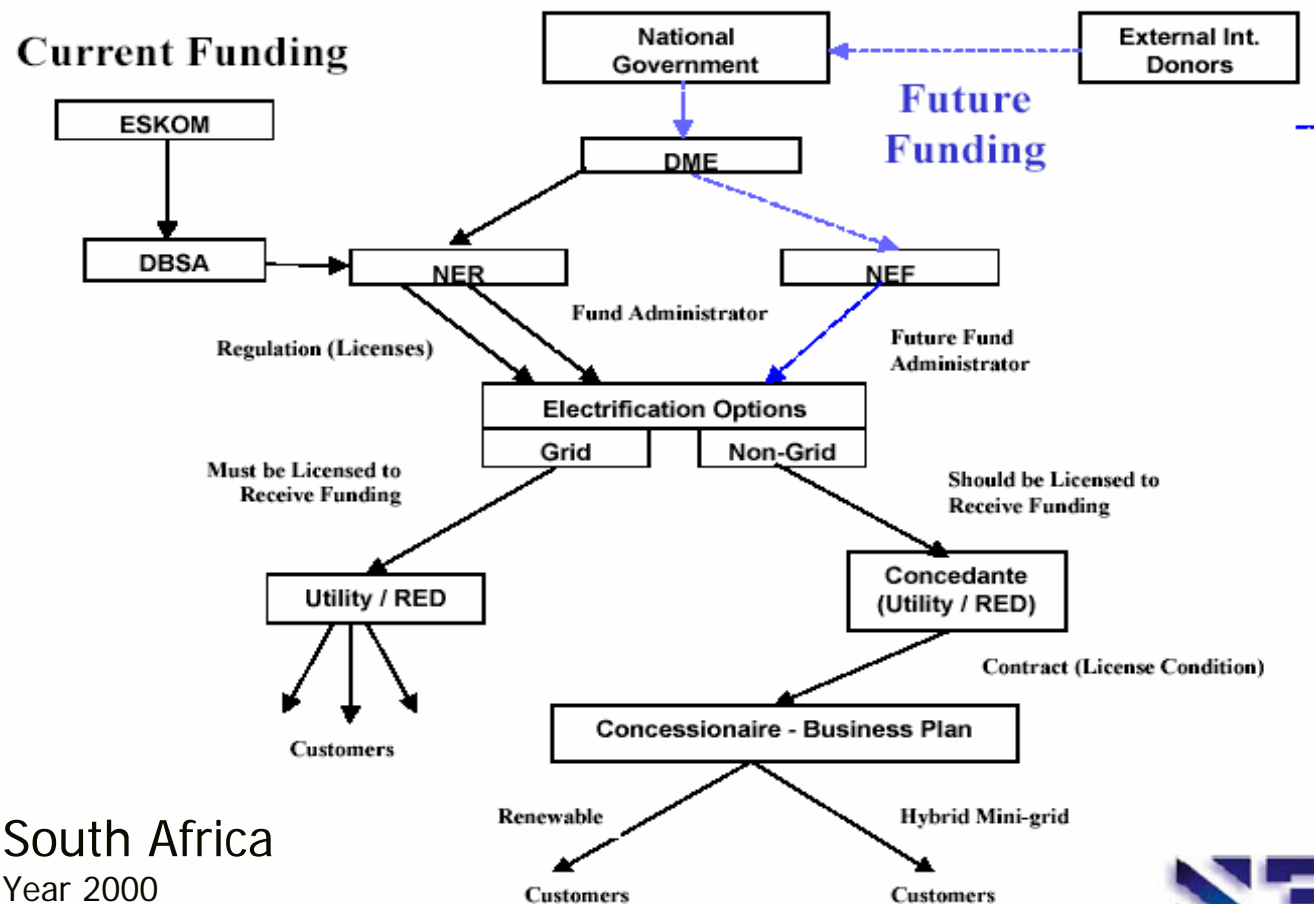
- ☐ All these RE/RES models and options need to be translated into programs and projects. And, programs and projects need not only to be designed and prepared, but also financed
- ☐ The latter can be facilitated only through appropriate institutions like REAs that manage REFs
- ☐ Examples from Zambia and Lesotho indicate that the region is moving in this direction
- ☐ Examples from South Africa show that local funds are operational in the Southern African Region



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ELECTRIFICATION FUNDING PROCESS



South Africa
Year 2000



NATIONAL ELECTRICITY REGULATOR



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Example: Local Government Electrification Fund in South Africa – CRITERIA:

- ☐ Projects with existing formal and/or informal housing receive higher priority
- ☐ Ample credit given to municipalities that had a sound track record with electrification
- ☐ Projects are limited to ensure that no single project is allocating funds for more than 2000 connections
- ☐ The allocation amount per connection is limited
- ☐ The projects would be ranked per province from the smallest capex per connection
- ☐ The biggest project in connection numbers per applicant would be ranked secondly



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7. Conclusions and Recommendations

- ☐ Countries of Southern Africa should consider the establishment of dedicated REFs as an important policy issue for decision before designing and embarking on large RE program implementation
- ☐ REFs should be established as independent entities under government supervision, managed and operated along commercial lines, and provide for accountability and transparency



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7. Conclusions and Recommendations – cont'd

- ☐ The role of various stakeholders in the RE process financing is of critical importance. They will participate and leverage REFs only when they see that their specific interests can be met in these REFs
- ☐ Some form of subsidy will be required in any RE program. The issue is what type of subsidy and how to deliver it. REFs represent an appropriate instrument for delivering subsidies without distorting the emerging rural energy service delivery markets



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THANK YOU!